Filing Date: January 13, 2005

Page 2 of 14

#### Amendments to the claims:

This listing of the claims will replace all prior versions and listings of the claims in the application.

# **Listing of Claims:**

1. (Currently amended) A device for cleaving an optical fibre, comprising a fixing mechanism configured to fix a fixing element to the optical fibre, and a cleaving mechanism configured to cleave the optical fibre, wherein the fixing mechanism includes a non-circular orifice configured to receive the fixing element therein, the fixing element having a corresponding non-circular cross section including a lifetime indicator that indicates the number of cleaves that have been made by the device after a device set up procedure and/or the number of cleaves remaining for the device until a device re-set procedure.

## 2.-3. (Canceled).

4. (Previously presented) A device according to claim 1, further comprising a hand-held tool.

### 5.-8. (Canceled).

9. (Previously presented) A device according to claim 1, wherein the fixing mechanism and the cleaving mechanism are arranged such that the fibre is cleaved, and consequently an end face of the fibre is produced, at a preset position along the fibre with respect to the fixing element and the cleaving mechanism cleaves the fibre such that the fibre end face produced is oriented at a non-perpendicular angle with respect to a longitudinal axis of the fibre.

Filing Date: January 13, 2005

Page 3 of 14

- 10. (Previously presented) A device according to claim 9, wherein the fixing mechanism and the cleaving mechanism are mutually arranged such that the fibre end face produced by the cleaving mechanism is at a preset orientation with respect to the fixing element.
- 11. (Previously presented) A device according to claim 10, wherein the fixing mechanism includes an orientation determining means arranged to orient the fixing element at a predetermined orientation about the longitudinal axis of the fibre, with respect to the cleaving mechanism.
- 12. (Currently amended) A device according to claim 11, wherein the orientation determining means comprises [[a]] the non-circular orifice arranged to receive the fixing element therein, the fixing element having a corresponding non-circular cross section.

# 13.-26. (Canceled).

27. (Previously presented) A device for cleaving an optical fibre, comprising a fixing mechanism configured to fix a fixing element to the optical fibre, and a cleaving mechanism configured to cleave the optical fibre, the device comprising a flexibly-positionable neck and clamp configured to temporarily attach the device in a working position on a telecoms distribution frame or other apparatus where optical fibres are to be connected.

## 28. (Canceled).

29. (Previously presented) A device for cleaving an optical fibre, comprising a fixing mechanism configured to fix a fixing element to the optical fibre, and a cleaving mechanism configured to cleave the optical fibre, wherein a connector body holder is attached

Filing Date: January 13, 2005

Page 4 of 14

to the device to hold a connector body into which will be inserted a crimped ferrule and cleaved optical fibre prepared by use of the device and the connector body holder is rotatably attached to the device to enable insertion of a ferrule and fibre into each end of the connector body from directions of insertion less than 180 degrees apart.

## 30. (Canceled).

- 31. (Previously presented)-A device for cleaving an optical fibre, comprising a mechanism configured to fix a fixing element to the optical fibre, and a cleaving mechanism configured to cleave the optical fibre, wherein a connector body holder is attached to the device to hold a connector body into which will be inserted a crimped ferrule and cleaved optical fibre prepared by use of the device, wherein the device comprises a ferrule assembly holder configured to hold a ferrule assembly of (i) the ferrule and (ii) the fibre to be cleaved and (iii) a ferrule holder, wherein the ferrule assembly holder is adapted to hold the ferrule assembly during a crimp and cleave operation and the device comprises a guide means attached thereto, wherein the ferrule assembly holder is moveable on a controlled path from a crimp-and-cleave position to bring the ferrule assembly into alignment with a connector body when held in the connector body holder in use, and the ferrule assembly holder is then releaseable to enable insertion and locking of the ferrule assembly into the connector body.
  - 32. (Previously presented) A device for cleaving an optical fibre, comprising a fixing mechanism configured to fix a fixing element to the optical fibre, and a cleaving mechanism configured to cleave the optical fibre, wherein a connector body holder is attached to the device to hold a connector body into which will be inserted a crimped ferrule and cleaved optical fibre prepared by use of the device, wherein the device comprises a ferrule assembly holder configured to hold a ferrule assembly of (i) the ferrule and (ii) the fibre to be cleaved and (iii) a ferrule holder, wherein the ferrule assembly holder is adapted to hold

Filing Date: January 13, 2005

Page 5 of 14

the ferrule assembly during a crimp and cleave operation, wherein the ferrule assembly holder is configured to receive a succession of suitably shaped and arranged ferrule assemblies, and wherein the ferrule assembly holder carries a re-useable resiliently-compressible member configured to be inserted into successive ferrule assemblies, between the end of the ferrule and a facing internal end of the ferrule holder, to compensate resiliently for cleaved fibre length tolerance variations during insertion of the ferrule assemblies into connector bodies held in the connector body holder, and the compressible member is removable from the ferrule assemblies after insertion and locking of the ferrule assemblies into the connector bodies.....

- 33. (Previously presented) A device according to claim 32, wherein the compressible member is attached to the ferrule assembly holder by a flexible member of sufficient length and flexibility to permit release of the ferrule assembly from the ferrule assembly holder and insertion and locking of the ferrule assembly into the connector body held in the connector body holder in use while the compressible member is in place in the ferrule assembly.
- 34. (Previously presented) A device according to claim 33, further comprising retraction means for retracting the flexible member after removal of the compressible member from the ferrule assembly-to re-position the compressible member on the ferrule assembly holder for insertion into the next ferrule assembly.
- 35. (Previously presented) A device for cleaving an optical fibre, comprising a fixing mechanism configured to fix a fixing element to the optical fibre, and a cleaving mechanism configured to cleave the optical fibre, wherein a connector body holder is attached to the device to hold a connector body into which will be inserted a crimped ferrule and cleaved optical fibre prepared by use of the device, the device further comprising a securing means attached thereto for directly securing the ferrule and the fibre during and after a crimp

Filing Date: January 13, 2005

Page 6 of 14

and cleave operation in the absence of any separate ferrule holder.

36. (Previously presented) A device according to claim 35 further comprising a transfer means configured such that the securing means and the secured crimped ferrule and cleaved fibre can be moved and guided by a guide means attached to the device, (i) to bring the ferrule and fibre from a crimp-and-cleave position into alignment with an connector body when held in the connector body holder in use and (ii) to insert the ferrule and fibre into the connector body in a required orientation with or without a keying formation on the ferrule, the securing means being releasable after the ferrule has been fixed in the connector body in the required orientation.

# 37. (Canceled).

- 38. (Previously presented) A method of coupling optical fibres using a device comprising a fixing mechanism configured to fix a fixing element to an optical fibre, and a cleaving mechanism configured to cleave the optical fibre, the method comprising:
- (a) directly securing a ferrule and a fibre in a securing means during and after a crimp and cleave operation in the absence of any separate ferrule holder,
- (b) moving the secured crimped ferrule and cleaved fibre (i) to bring the ferrule and fibre from the crimp-and-cleave position into alignment with a connector body when held in a connector body holder and (ii) to insert the ferrule and fibre into the connector body in a required orientation with or without a keying formation on the ferrule,
- (c) fixing the ferrule and fibre in the connector body in the required orientation, and then
  - (d) releasing the securing means.
- 39. (Previously presented) A device according to claim 27, further comprising a hand-held tool.

Filing Date: January 13, 2005

Page 7 of 14

- 40. (Previously presented) A device according to claim 27, wherein the fixing mechanism and the cleaving mechanism are arranged such that the fibre is cleaved, and consequently an end face of the fibre is produced, at a preset position along the fibre with respect to the fixing element and wherein the cleaving mechanism cleaves the fibre such that the fibre end face produced is oriented at a non-perpendicular angle with respect to a longitudinal axis of the fibre.
- 41. (Previously presented) A device according to claim 40, wherein the fixing mechanism and the cleaving mechanism are mutually arranged such that the fibre end face produced by the cleaving mechanism is at a preset orientation with respect to the fixing element.
- 42. (Previously presented) A device according to claim 41, wherein the fixing mechanism includes an orientation determining means arranged to orient the fixing element at a predetermined orientation about the longitudinal axis of the fibre, with respect to the cleaving mechanism.
- 43. (Previously presented) A device according to claim 42, wherein the orientation determining means comprises a non-circular orifice arranged to receive the fixing element therein, the fixing element having a corresponding non-circular cross-section.
- 44. (Previously presented) A device according to claim 27, wherein the cleaving mechanism includes a scoring blade configured to score the fibre and cause a crack to propagate through the fibre to cleave the fibre, wherein the scoring blade includes a plurality of positions such that for each fibre, or set of fibres that is cleaved by the device, a different one of the plurality of positions on the blade is used to score the fibre.

Filing Date: January 13, 2005

Page 8 of 14

- 45. (Previously presented) A device according to claim 29, further comprising a hand-held tool.
- 46. (Previously presented) A device according to claim 29, wherein the fixing mechanism and the cleaving mechanism are arranged such that the fibre is cleaved, and consequently an end face of the fibre is produced, at a preset position along the fibre with respect to the fixing element and wherein the cleaving mechanism cleaves the fibre such that the fibre end face produced is oriented at a non-perpendicular angle with respect to a longitudinal axis of the fibre.
- 47. (Previously presented) A device according to claim 46, wherein the fixing mechanism and the cleaving mechanism are mutually arranged such that the fibre end face produced by the cleaving mechanism is at a preset orientation with respect to the fixing element.
- 48. (Previously presented) A device according to claim 47, wherein the fixing mechanism includes an orientation determining means arranged to orient the fixing element at a predetermined orientation about the longitudinal axis of the fibre, with respect to the cleaving mechanism.
- 49. (Previously presented) A device according to claim 48, wherein the orientation determining means comprises a non-circular orifice arranged to receive the fixing element therein, the fixing element having a corresponding non-circular cross-section.
- 50. (Previously presented) A device according to claim 29, wherein the cleaving mechanism includes a scoring blade configured to score the fibre and cause a crack to propagate through the fibre to cleave the fibre, wherein the scoring blade includes a plurality of positions such that for each fibre, or set of fibres that is cleaved by the device, a different

Filing Date: January 13, 2005

Page 9 of 14

one of the plurality of positions on the blade is used to score the fibre.

- 51. (Previously presented) A device according to claim 31, further comprising a hand-held tool.
- 52. (Previously presented) A device according to claim 31, wherein the fixing mechanism and the cleaving mechanism are arranged such that the fibre is cleaved, and consequently an end face of the fibre is produced, at a preset position along the fibre with respect to the fixing element and wherein the cleaving mechanism cleaves the fibre such that the fibre end face produced is oriented at a non-perpendicular angle with respect to a longitudinal axis of the fibre.
- 53. (Previously presented) A device according to claim 52, wherein the fixing mechanism and the cleaving mechanism are mutually arranged such that the fibre end face produced by the cleaving mechanism is at a preset orientation with respect to the fixing element.
- 54. (Previously presented) A device according to claim 53, wherein the fixing mechanism includes an orientation determining means arranged to orient the fixing element at a predetermined orientation about the longitudinal axis of the fibre, with respect to the cleaving mechanism.
- 55. (Previously presented) A device according to claim 54, wherein the orientation determining means comprises a non-circular orifice arranged to receive the fixing element therein, the fixing element having a corresponding non-circular cross-section.
- 56. (Previously presented) A device according to claim 31, wherein the cleaving mechanism includes a scoring blade configured to score the fibre and cause a crack to

Filing Date: January 13, 2005

Page 10 of 14

propagate through the fibre to cleave the fibre, wherein the scoring blade includes a plurality of positions such that for each fibre, or set of fibres that is cleaved by the device, a different one of the plurality of positions on the blade is used to score the fibre.

- 57. (Previously presented) A device according to claim 32, further comprising a hand-held tool.
- 58. (Previously presented) A device according to claim 32, wherein the fixing mechanism and the cleaving mechanism are arranged such that the fibre is cleaved, and consequently an end face of the fibre is produced, at a preset position along the fibre with respect to the fixing element and wherein the cleaving mechanism cleaves the fibre such that the fibre end face produced is oriented at a non-perpendicular angle with respect to a longitudinal axis of the fibre.
- 59. (Previously presented) A device according to claim 58, wherein the fixing mechanism and the cleaving mechanism are mutually arranged such that the fibre end face produced by the cleaving mechanism is at a preset orientation with respect to the fixing element.
- 60. (Previously presented) A device according to claim 59, wherein the fixing mechanism includes an orientation determining means arranged to orient the fixing element at a predetermined orientation about the longitudinal axis of the fibre, with respect to the cleaving mechanism.
- 61. (Previously presented) A device according to claim 60, wherein the orientation determining means comprises a non-circular orifice arranged to receive the fixing element therein, the fixing element having a corresponding non-circular cross-section.

Filing Date: January 13, 2005

Page 11 of 14

- 62. (Previously presented) A device according to claim 32, wherein the cleaving mechanism includes a scoring blade configured to score the fibre and cause a crack to propagate through the fibre to cleave the fibre, wherein the scoring blade includes a plurality of positions such that for each fibre, or set of fibres that is cleaved by the device, a different one of the plurality of positions on the blade is used to score the fibre.
- 63. (Previously presented) A device according to claim 35, further comprising a hand-held tool.
- 64. (Previously presented) A device according to claim 35, wherein the fixing mechanism and the cleaving mechanism are arranged such that the fibre is cleaved, and consequently an end face of the fibre is produced, at a preset position along the fibre with respect to the fixing element and wherein the cleaving mechanism cleaves the fibre such that the fibre end face produced is oriented at a non-perpendicular angle with respect to a longitudinal axis of the fibre.
- 65. (Previously presented) A device according to claim 64, wherein the fixing mechanism and the cleaving mechanism are mutually arranged such that the fibre end face produced by the cleaving mechanism is at a preset orientation with respect to the fixing element.
- 66. (Previously presented) A device according to claim 65, wherein the fixing mechanism includes an orientation determining means arranged to orient the fixing element at a predetermined orientation about the longitudinal axis of the fibre, with respect to the cleaving mechanism.
- 67. (Previously presented) A device according to claim 66, wherein the orientation determining means comprises a non-circular orifice arranged to receive the fixing element

Filing Date: January 13, 2005

Page 12 of 14

therein, the fixing element having a corresponding non-circular cross-section.

- 68. (Previously presented) A device according to claim 35, wherein the cleaving mechanism includes a scoring blade configured to score the fibre and cause a crack to propagate through the fibre to cleave the fibre, wherein the scoring blade includes a plurality of positions such that for each fibre, or set of fibres that is cleaved by the device, a different one of the plurality of positions on the blade is used to score the fibre.
- 69. (New) A device according to claim 1, further comprising a lifetime indicator that indicates the number of cleaves that have been made by the device after a device set-up procedure and/or the number of cleaves remaining for the device until a device re-set procedure.
- 70. (New) A device according to claim 1, further comprising a closing means that closes the non-circular orifice when the device is not in operation.